

What is claimed is:

1. An electrical connector comprising:
  - a first connector body having interior walls defining an interior volume and first and second axially opposite open ends;
    - means defining a plurality of wire channels in said first end extending into the interior volume;
    - conductive terminals disposed in at least some of said channels;
    - printed circuit board guide structures on the interior walls to receive and hold a printed circuit board within said volume;
  - a second connector body having interior walls defining an interior volume and first and second axially opposite ends, said second connector body being of such size and shape as to fit telescopically into the second end of said first connector body;
  - a printed circuit board disposed within and held by said guide structure and having edge contacts in electrical contacting relationship with the conductive terminals disposed in said channels;
  - means defining a plurality of parallel wire guide channels in the second end of said second connector body and conductive terminal means in at least some of said channels; and
  - latch means having first and second complementally interengaging portions on said first and second connector bodies to releasably latch said bodies together when telescopically engaged.
2. The apparatus as defined in claim 1 further including a position assurance feature associated with said first connector body for accepting the printed circuit board into said guide channels in only one predetermined orientation.
3. The apparatus as defined in claim 1 further including a position assurance means insertable into said first connector body at right angles to said axis to block movement of said printed circuit board from the inserted position.

4. The apparatus as defined in claim 1 further including detent means complementally associated between the opposite lateral edges of said printed circuit board and the interior volume of said first connector body.

5. The apparatus as defined in claim 4 further including a latching mechanism insertable into the first end of said first connector body for supplementing the detent means holding the printed circuit board in the inserted position within the guide structure of the first connector body.

6. The apparatus as defined in claim 1 wherein the first and second connector bodies are made of molded plastic.

7. A smart connector for intermediate location in an electrical circuit comprising:

first and second complementary connector bodies which can be joined together and latched to define an interior volume;

a printed circuit board disposed within said volume;

said printed circuit board having conductive contacts formed at opposite ends thereof; and

first and second terminals mounted in said first and second bodies respectively with spring portions thereof in electrically conductive engagement with said contacts.

8. A connector as defined in claim 7 wherein guideways are provided in at least said first body to slidingly receive said circuit board.

9. A connector as defined in claim 8 further including means for assuring that the circuit board is placed in the volume in a predetermined orientation and location.